ENTERED



OIPE

RAW SEQUENCE LISTING DATE: 08/01/2003 PATENT APPLICATION: US/10/627,310 TIME: 14:50:04

Input Set : A:\Seglist.txt

Output Set: N:\CRF4\08012003\J627310.raw

```
4 <110> APPLICANT: Brooks, Cydney C.
6 <120> TITLE OF INVENTION: Methods for Treating Diabetes and Insulin resistance
8 <130> FILE REFERENCE: ADY-009
```

C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/627,310

C--> 10 <140> CORRENT APPLICATION NOMBER: 05/10/627,310
C--> 10 <141> CURRENT FILING DATE: 2003-07-25

- 10 <150> PRIOR APPLICATION NUMBER: 60/401,389
- 11 <151> PRIOR FILING DATE: 2002-08-05
- 13 <160> NUMBER OF SEQ ID NOS: 2
- 15 <170> SOFTWARE: FastSEQ for Windows Version 4.0
- 17 <210> SEQ ID NO: 1 18 <211> LENGTH: 3775
- 19 <212> TYPE: DNA
- 20 <213> ORGANISM: Homo sapiens
- 22 <400> SEQUENCE: 1
- 23 tgagccggcc gcagagccat ggcgggcggg gaagaccgcg gggacggaga gccggtatca 60 24 gtggtgaccg tgagggtgca gtacctggaa gacaccgacc ccttcgcatg tgccaacttt 120 25 ccggagccgc gccgggcccc cacctgcagc ctggacgggg cgctgccctt gggcgcgcag 180
- 26 ataccegegg tgcacegect gctgggageg cegetcaagt tggaggattg tgctctgcaa 240
- 27 gtgtctccct ccggatacta cctggacacc gagctgtccc tggaagagca gcgggagatg 300 28 ctggagggct tctatgaaga gatcagcaaa gggcggaagc ccacgctgat ccttcggacc 360
- 29 cagetetetg tgagggteaa egetatettg gaaaagetgt atageteeag tggteetgag 420
- 30 etcegeeget ecetettete actgaageag atetteeagg aggacaaaga ectggtgeet 480
- 31 gaatttgtgc attcagaggg gctgagctgc ctgatccgtg tgggtgctgc tgccgaccac 540 32 aactaccaga gctacatcct tagagcgctc ggccagctga tgctctttgt ggatggaatg 600
- 33 ctgggggtgg tggcccacag tgacactatt cagtggctgt acacattgtg tgccagcctg 660
- 34 tecegettgg tggtgaagae ageeetgaag etgetgttgg tgtttgtaga atacteegaa 720
- 35 aacaacgcac cgctgttcat ccgtgcagtg aactctgtgg ccacgaccac cggtgctcct 780 36 ccctgggcca atctggtgtc catcctggag gagaagaatg gcgctgaccc tgagttgttg 840
- 37 gtgtacacgg tcaccctcat caacaagacg ctggcggcgc tcccggacca ggactccttc 900
- 38 tacgatgtga cggatgcact ggagcagcag ggcatggaca cgctggtcca gcgccacctg 960
- 39 ggcactgcgg gcactgacgt cgacctgcgc acgcagcttg tgctctacga gaacgccctg 1020
- 40 aaattggagg atggagacat cgaagaagcc ccaggcgctg gtgggcggcg ggaacgacga 1080 41 aagcettett ctgaggaggg caagaggagc cgccgttete tggaaggegg gggetgeece 1140
- 42 gegegtgeec eggaacetgg ecceacagge eccecteac eggtaggeec eacetettee 1200
- 43 accggcccg ccctgctgac aggccccgcc tccagccctg tgggccctcc ctccggtctc 1260
- 44 caagetteag tgaacetttt teetaeeate tetgtggeae eeteagetga eaceteeage 1320 45 gagaggagea tetaeaaage eeggtteetg gagaatgtgg eggeageaga aacagagaag 1380
- 46 caggttgcgc tggcccaggg ccgggcagag acacttgccg gggccatgcc caatgaggcg 1440
- 47 ggtggacacc cagatgcccg gcaactctgg gactccccag agacagcccc tgcagccaga 1500
- 48 acaccccaga gccctgcccc ctgtgtcctg ctccgggccc agcgaagcct tgcaccagag 1560 49 cccaaggagc cactgatacc agcaagccc aaggctgagc ccatctggga gctccctacc 1620
- 50 cgtgcaccca ggctctctat tggggacctg gacttttcag atctagggga ggatgaagac 1680
- 51 caggacatgc tgaatgtaga gtctgtggag gctgggaaag acatcccagc tccctcaccc 1740

DATE: 08/01/2003

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/627,310 TIME: 14:50:04

Input Set : A:\Seqlist.txt

Output Set: N:\CRF4\08012003\J627310.raw

```
52 ccactgccc tgctctcggg agtaccccc cctccccac ttccacctcc cccacccatc 1800
53 aaaggcccct tcccaccacc tccacctcta cctctggctg cccctcttcc ccattcagtg 1860
54 cctgacagct cagccctccc cactaagagg aagacagtaa aacttttctg gcgtgacgtg 1920
55 aagetggetg ggggecatgg agtetetgea ageegetttg ggeeetgege caccetetgg 1980
56 gcttcactgg accetgtctc agtggacacg gcccgactgg aacacctctt tgagtctcgt 2040
57 gccaaagagg tgctgccctc caagaaagct ggagagggcc gccggacaat gaccacagtg 2100
58 ctggacccca agcgcacgaa cgccatcaac atcggcctaa ccacactgcc acctgtgcat 2160
59 gtcattaagg ctgctctgct caactttgat gagtttgctg tcagcaagga tggcattgag 2220
60 aagctactga ccatgatgcc cacggaggaa gagcggcaga agattgaggg agcccagctg 2280
61 gccaaccetg acataccect gggcccagec gagaacttee tgatgaetet tgcctccatt 2340
62 ggcggcctcg ctgctcgtct acaactctgg gccttcaagc tggactatga cagcatggag 2400
63 cgggaaattg ctgagccact gtttgacctg aaagtgggta tggaacagct ggtacagaat 2460
64 gccaccttcc gctgcatcct ggctaccctc ctagctgtgg gcaacttcct caatggctcc 2520
65 cagagcagcg gctttgagct gagctacctg gagaaggtgt cagatgtgaa ggacacggtg 2580
66 cgtcgacagt cactgctaca ccatctctgc tccctagtgc tccagacccg gcctgagtcc 2640
67 tetgacetet atteagaaat ecetgeeetg accegetgtg ceaaggtgga etttgaacag 2700
68 ctgactgaga acctggggca gctggagcgc cggagccggg cagccgagga aagcctgcgg 2760
69 agettggecà ageatgaget ggececagee etgegtgece geeteaceea etteetggae 2820
70 cagtgtgccc gccgtgttgc catgctaagg atagtgcacc gccgtgtctg caataggttc 2880
71 catgccttcc tgctctacct gggctacacc ccgcaggcgg cccgtgaagt gcgcatcatg 2940
72 cagttctgcc acacgctgcg ggaatttgcg cttgagtatc ggacttgccg ggaacgagtg 3000
73 ctacagcagc agcagaagca ggccacatac cgtgagcgca acaagacccg gggacgcatg 3060
74 atcaccgaga cagagaagtt ctcaggtgtg gctggggaag cccccagcaa cccctctgtc 3120
75 ccagtagcag tgagcagcgg gccaggccgg ggagatgctg acagtcatgc tagtatgaag 3180
76 agtctgctga ccagcaggct tgaggacacc acacacaatc gccgcagcag aggcatggtc 3240
77 cagageaget ecceaateat geceaeagtg gggeeeteea etgeateece agaagaacee 3300
78 ccaggeteca gtttacccag tgatacatca gatgagatca tggacettet ggtgcagtca 3360
79 gtgaccaaga gcagtcctcg tgccttagct gctagggaac gcaagcgttc ccgcggcaac 3420
80 cgcaagtctt tgagaaggac gttgaagagt gggctcggag atgacctggt gcaggcactg 3480
81 ggactaagca agggtcctgg cctggaggtg tgaaggtgct gtatcccgga aatctatctg 3540
82 gaccctggac tgcagtgcag gagatgacag agtgaggagg gcccagagca gaattctggc 3600
83 cccagaactc tgtgcccagg agccatgcct tgagcagtat tagccgtgtg tgtatgcatg 3660
84 tgagtgtgtg tgtatgtgtg tgtgtgcatg catatgcatg tgcatgtgtg tgagctcctt 3720
                                                                   3775
87 <210> SEQ ID NO: 2
88 <211> LENGTH: 1164
89 <212> TYPE: PRT
90 <213> ORGANISM: Homo sapiens
92 <400> SEQUENCE: 2
93 Met Ala Gly Glu Asp Arg Gly Asp Gly Glu Pro Val Ser Val Val
95 Thr Val Arg Val Gln Tyr Leu Glu Asp Thr Asp Pro Phe Ala Cys Ala
97 Asn Phe Pro Glu Pro Arg Arg Ala Pro Thr Cys Ser Leu Asp Gly Ala
99 Leu Pro Leu Gly Ala Gln Ile Pro Ala Val His Arg Leu Leu Gly Ala
                           55
101 Pro Leu Lys Leu Glu Asp Cys Ala Leu Gln Val Ser Pro Ser Gly Tyr
102 65
```

RAW SEQUENCE LISTING DATE: 08/01/2003 PATENT APPLICATION: US/10/627,310 TIME: 14:50:04

Input Set : A:\Seqlist.txt

Output Set: N:\CRF4\08012003\J627310.raw

												_			_	~ 1
103	Tyr	Leu	Asp	Thr		Leu	Ser	Leu	Glu		Gln	Arg	Glu	Met		Glu
104					85					90	_	_		_	95	_
	Gly	Phe	Tyr		Glu	Ile	Ser	Lys		Arg	Lys	Pro	Thr		TTE	Leu
106				100					105					110	_	_
107	Arg	Thr	Gln	Leu	Ser	Val	Arg		Asn	Ala	Ile	Leu		Lys	Leu	Tyr
108			115					120					125			
109	Ser	Ser	Ser	Gly	Pro	Glu	Leu	Arg	Arg	Ser	Leu		Ser	Leu	Lys	Gln
110		130					135					140		-		
111	Ile	Phe	Gln	Glu	Asp	Lys	Asp	Leu	Val	Pro	Glu	Phe	Val	His	Ser	
112						150					155					160
113	Gly	Leu	Ser	Cys	Leu	Ile	Arg	Val	Gly	Ala	Ala	Ala	Asp	His		Tyr
114					165					170					175	
115	Gln	Ser	Tyr	Ile	Leu	Arg	Ala	Leu		Gln	Leu	Met	Leu		Val	Asp
116				180					185					190		
117	Gly	Met	Leu	Gly	Val	Val	Ala	His	Ser	Asp	Thr	Ile		Trp	Leu	Tyr
118			195					200					205			
119	Thr	Leu	Cys	Ala	Ser	Leu	Ser	Arg	Leu	Val	Val		Thr	Ala	Leu	Lys
120		210					215					220				
121	Leu	Leu	Leu	Val	Phe	Val	Glu	Tyr	Ser	Glu	Asn.	Asn	Ala	Pro	Leu	Phe
	225					230					235					240
123	Ile	Arg	Ala	Val	Asn	Ser	Val	Ala	Thr		Thr	Gly	Ala	Pro	Pro	Trp
124					245					250					255	
125	Ala	Asn	Leu	Val	Ser	Ile	Leu	Glu		Lys	Asn	Gly	Ala	Asp	Pro	Glu
126				260					265					270		
127	Leu	Leu	Val	Tyr	Thr	Val	Thr	Leu	Ile	Asn	Lys	Thr	Leu	Ala	Ala	Leu
128			275					280					285			
129	Pro	Asp	Gln	Asp	Ser	Phe	Tyr	Asp	Val	Thr	Asp		Leu	Glu	Gln	Gln
130		290					295					300				
131	Gly	Met	Asp	Thr	Leu		Gln	Arg	His	Leu	Gly	Thr	Ala	Gly	Thr	
	305					310					315					320
133	Val	Asp	Leu	Arg		Gln	Leu	Val	Leu		Glu	Asn	Ala	Leu		Leu
134					325					330			_		335	
135	Glu	Asp	Gly		Ile	Glu	Glu	Ala		Gly	Ala	Gly	Gly		Arg	GLu
136				340					345				_	350	_	_
137	Arg	Arg		Pro	Ser	Ser	Glu		Gly	Lys	Arg	Ser		Arg	Ser	Leu
138			355					360				_	365	_		
139	Glu		Gly	Gly	Cys	Pro		Arg	Ala	Pro	Glu		Gly	Pro	Thr	GLY
140		370					375			_		380	_		_	_
		Ala	Ser	Pro							Thr			Ala		
142	385										395			_		400
143	Thr	Gly	Pro	Ala	Ser	Ser	Pro	Val	Gly		Pro	Ser	GLy	Leu		Ala
144					405					410					415	
145	Ser	Val	Asn		Phe	Pro	Ţhr	Ile		Val	Ala	Pro	Ser		Asp	Thr
146				420					425					430		
147	Ser	Ser	Glu	Arg	Ser	Ile	Tyr		Ala	Arg	Phe	Leu			Val	Ala
148			435					440					445			
149	Ala	Ala	Glu	Thr	Glu	Lys			Ala	Leu	Ala	Gln	Gly	Arg	Ala	Glu
150		450					455					460			_	
151	Thr	Leu	Ala	Gly	Ala	Met	Pro	Asn	Glu	Ala	Gly	Gly	His	Pro	Asp	Ala

DATE: 08/01/2003 RAW SEQUENCE LISTING TIME: 14:50:04 PATENT APPLICATION: US/10/627,310

Input Set : A:\Seqlist.txt
Output Set: N:\CRF4\08012003\J627310.raw

152	465					470					475					480
153	Ara	Gln	Leu	Trp	Asp	Ser	Pro	Glu	Thr	Ala	Pro	Ala	Ala	Arg	Thr	Pro
154	9			1-	485					490				_	495	
	Cln	Sor	Dro	בות		Cve	Vəl	T.e.ii	T.e.ii		Δla	Gln	Ara	Ser	Len	Ala
	GIII	Ser	FIO		LIO	Cys	Val	пси	505	111 9	7114	0111	1119	510		1120
156	_	~ 1	_	500	~ 1	D	T	- 1 -		ת ד ת	C	D	T	-	C1	Dro
	Pro	Glu		Lys	GLu	Pro	Leu		Pro	Ата	ser	Pro		Ala	GIU	PIO
158			515					520					525	_	•	
159	Ile	Trp	Glu	Leu	Pro	Thr	Arg	Ala	Pro	Arg	Leu	Ser	Ile	Gly	Asp	Leu
160		530					535					540				
161	Asp	Phe	Ser	Asp	Leu	Gly	Glu	Asp	Glu	Asp	Gln	Asp	Met	Leu-	Asn	Val
	545			-		550		_			555					560
		Ser	Val	Glu	Ala	Glv	Lvs	Asp	Ile	Pro	Ala	Pro	Ser	Pro	Pro	Leu
164	014	001		0_0	565	~_ <u>_</u>	-1-	I-		570					575	
	Dwo	T 011	T 011	802		1/21	Dro	Dro	Dro					Pro		Pro
	PIO	ьeu	ьеu		СТУ	vaı	FIO	FIO	585	110	LLO	Leu	110	590	110	110
166	_		_	580	_		_	_		D	D	T	D		7.7	70.7
	Pro	TTE	_	GTA	Pro	Pne	Pro		Pro	Pro	Pro	ьeu		Leu	Ата	Ата
168			595					600					605			_
169	Pro	Leu	Pro	His	Ser	Val	Pro	Asp	Ser	Ser	Ala		Pro	Thr	Lys	Arg
170		610					615					620				
171	Lys	Thr	Val	Lys	Leu	Phe	Trp	Arg	Asp	Val	Lys	Leu	Ala	Gly	Gly	His
	625			-		630					635					640
		Val	Ser	Ala	Ser	Ara	Phe	Glv	Pro	Cvs	Ala	Thr	Leu	Trp	Ala	Ser
174	O= 1				645	5		1		650				-	655	
	T 011	7 cn	Dro	Val		Val	Asn	Thr	Δla		Len	Glu	His	Leu		Glu
176	цец	АЗР	FIO	660	Ser	Val	АЗР	1111	665	1119	Lou	OLU	1110	670	1110	014
	a	70	70.71 -		C1	77-7	т	Dwa		T	T ***	7.1.	C1.,	Glu	Clu	7 ra
	ser	Arg		ьуѕ	GLU	Val	ьeu		Ser	гу	ъу	Ala		Giu	Gry	Arg
178	_		675				_	680	-		-	m1	685	70.7	T1 -	70
	Arg		Met	Thr	Thr	Val		Asp	Pro	Lys	Arg	Tnr	Asn	Ala	тте	Asn
180		690					695					700		_		_
181	Ile	Gly	Leu	Thr	Thr	Leu	Pro	Pro	Val	His		Ile	Lys	Ala	Ala	
	705					710					715					720
183	Leu	Asn	Phe	Asp	Glu	Phe	Ala	Val	Ser	Lys	Asp	Gly	Ile	Glu	Lys	Leu
184					725					730					735	
185	Leu	Thr	Met	Met	Pro	Thr	Glu	Glu	Glu	Arg	Gln	Lys	Ile	Glu	Gly	Ala
186				740					745					750		
	Gln	Len	Ala		Pro	asp	Ile	Pro	Leu	Glv	Pro	Ala	Glu	Asn	Phe	Leu
188	02		755			F		760		1			765			
	Mot	Th~		ЛΙэ	Sar	Tlo	Clv		I.e.i	Δla	Δla	Ara		Gln	Len	Trp
	Mec	770	пеа	Ата	Der	116	775	ОТУ	пси	nia	711 a	780	LCu	0111	шса	115
190	m 7		Ŧ	.	7	Ш		Q	Mak	C1	7\~~		т1.	70.10	C1.,	Dro
		Phe	ьуs	Leu	Asp		Asp	Ser	Met	GIU		GIU	тте	Ala	GIU	000
	785					790					795			_		800
193	Leu	Phe	Asp	Leu	Lys	Val	Gly	Met	Glu		Leu	Val	Gln	Asn	Ala	Thr
194					805					810					815	
195	Phe	Arg	Cys	Ile	Leu	Ala	Thr	Leu	Leu	Ala	Val	Gly	Asn	Phe	Leu	Asn
196		_	-	820					825					830		
	Glv	Ser	Gln		Ser	Glv	Phe	Glu	Leu	Ser	Tyr	Leu	Glu	Lys	Val	Ser
198	_		835			1		840			4		845	4		
		Val		Aen	Thr	Val	Ara		Gln	Ser	Ĭ.e.ii	Ten		His	Len	Cvs
	nap	850	туз	тэр	1111	v a ı	855	Y	<u></u>	~ C_	200	860				-1-
200		050					000					500				

RAW SEQUENCE LISTING DATE: 08/01/2003 PATENT APPLICATION: US/10/627,310 TIME: 14:50:04

Input Set : A:\Seqlist.txt
Output Set: N:\CRF4\08012003\J627310.raw

	Ser 865	Leu	Val	Leu	Gln	Thr 870	Arg	Pro	Glu	Ser	Ser 875	Asp	Leu	Tyr	Ser	Glu 880
204	Ile				885					890					895	
206				900					905					910		
208	. Leu		915					920					925	_		_
210	Leu	930					935					940				_
212	Ile 945					950					955					960
214	Leu				965					970					975	
216				980					985					990	_	
218	Arg		995					1000)			_	1005	5	_	
220		1010)				1015	5				1020)		_	
222	Ala 1025	5				1030)				1035	5				1040
224	Gly				1045	5				1050)				1055	5
226	Leu			1060)				1069	5		_	_	1070) -	-
228	Met		1075	5				1080)				1085	<u> </u>		
230	Ala	1090)				1095	5				1100)	_		
232	Asp 1105	5				1110) · · ·				1115	5			•	1120
234	Arg				1125	5				1130)				1135	5
236	Ser	Leu	Arg	Arg 1140		Leu	Lys	Ser	Gly 1145		Gly	Asp	Asp	Leu 1150		Gln
	Ala														•	

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/627,310

DATE: 08/01/2003 TIME: 14:50:05

Input Set : A:\Seqlist.txt

Output Set: N:\CRF4\08012003\J627310.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date